

LBT Observing Log: 2026 Jan 29 UT

Observers: Alex Becker

Partner Observer: Dominick Rowan

Telescope Operator: Riccardo Ansaldi

Plan:

PEPSI

OSU_BHBinaries/362498302094814720 (J00435538+3505407)

OSU_BHBinaries/300726119643476992 (J01574758+2928468)

OSU_BHBinaries/665777212860770560 (J08270090+2157246)

OSU_BHBinaries/659410112822844288 (J08412189+1808031)

OSU_BHBinaries/3089372385493635584 (J07534797+0408447)

OSU_BHBinaries/1098324086498919552 (J08073604+6945544)

OSU_MWAbundDisp/2MJ0830+7912

OSU_MWAbundDisp/2MJ0924+5010

OSU_MWAbundDisp/2MJ0911+4223

OSU_MWAbundDisp/2MJ0925+2818

OSU_MWAbundDisp/2MJ0926+2818

OSU_MWAbundDisp/2MJ0939+3645

OSU_MWAbundDisp/2MJ0943+3456

OSU_MWAbundDisp/2MJ1031+3526

OSU_MWAbundDisp/2MJ1131+4552

OSU_MWAbundDisp/2MJ1157+5615

BHBinaries/5721905003970002688 (J08255161-1622474)

BHBinaries/3992896714154450176 (J11261825+2351553)

OSU_MWAbundDisp/2MJ0755+5437

OSU_MWAbundDisp/2MJ0747+5048

OSU_MWAbundDisp/2MJ0746+1855

BHBinaries/3857106104706784512 (J10275214+0331399) 14.8 mag

BHBinaries/4029336286140566400 (J12130153+3513578) 14.5 mag

ND_M3Cluster/NGC5272357

ND_M3Cluster/NGC5272289

OSU_BHBinaries/3953673427835638784 (J12203782+2229048)
OSU_BHBinaries/3906039697902758528 (J12035690+0916227)
OSU_BHBinaries/1550602907481860480 (J13191371+4505098)
#OSU_BHBinaries/1566339427134101760 (J13161518+5708357) skipping clouds getting rough
OSU_MWAbundDisp/2MJ1343+5500
OSU_MWAbundDisp/J09045727+2621482
BHBinaries/3992896714154450176 (J11261825+2351553)
OSU_BHBinaries/1484399422587485056 (J14155538+3745046) (V=13.9)
OSU_BHBinaries/1506340619499390720 (J14095267+4703177) (V=14.3)

Summary:

The original plan was to begin the night with some of the multistar targets, but unfortunately due to technical issues we were unable to get them in time.

Did some BHBinaries and MWAbund to fill time until the high priority ND and UM targets rise around UT 8:30. We were planning to do the TCrB, but it looks like clouds will prevent us from finishing all CDs, so we will go with shorter exposure bright PEPSI targets instead to finish out the night.

PEPSI log:

https://drive.google.com/file/d/18XilbvSu2lXr5ivvQ-bom7n82ejupga1/view?usp=drive_link

Issues:

LUC11 remains offline (IT #9223)

Weather:

Cloudy and sub-arcsecond seeing for most of the night.

Overview:

00:53 Staying closed at sunset due to clouds

01:31 Opening

02:20 SX collimation is way off, after work on the SX M2 swingarm tension during the day. Incoming clouds are making it impossible to collimate at the moment as we are losing a 2 mag star on the guiders.

We were way out of focus and had a ton of coma. The arc we saw was from the coma. With being that much out of focus, we were not able to see anything else from the pupil

03:17 Riccardo got it!

PEPSI

OSU BHBinaries

362498302094814720

Seeing ~1"

03:33 Preset

03:39 Starting exposure

300726119643476992

04:06 Preset

04:09 Starting exposure

665777212860770560

04:16 Preset

04:24 GCS seems to be stuck, new preset

04:24 Nope, restarting GCS on both sides

04:27 Now we got it, preset number 5

04:28 Starting exposure

04:30 Repeating exposure to meet SNR requirement
SNR 81/242

659410112822844288

04:33 Preset

04:36 Starting exposure

04:43 Repeating exposure

3089372385493635584

04:50 Preset

04:56 Starting exposure

05:56 Repeating exposure

1098324086498919552

05:14 Preset

05:19 Starting exposure

OSU_MWAbundDisp

2MJ0830+7912

05:25 Preset

05:27 Starting exposure

2MJ0924+5010

05:33 Preset

05:35 Starting exposure

2MJ0911+4223

05:41 Preset

05:43 Starting exposure

2MJ0925+2818

05:49 Preset

05:52 Starting exposure

2MJ0926+2818

05:57 Preset

05:59 Starting exposure

2MJ0939+3645

06:04 Preset

06:06 Starting exposure

2MJ0943+3456

06:12 Preset

06:13 Starting exposure

2MJ1031+3526

06:19 Preset

06:20 Starting exposure

2MJ1131+4552

06:26 Preset

06:28 Starting exposure

2MJ1157+5615

06:35 Preset

06:38 Starting exposure

OSU_BHBinaries

5721905003970002688 (J08255161-1622474)

Seeing 1.7"

06:45 Preset

06:49 Starting exposure

06:52 Repeating exposure

3992896714154450176 (J11261825+2351553)

06:54 Preset

06:59 Starting exposure

OSU_MWAbundDisp

2MJ0755+5437

00:17 Preset

07:20 GCS is stuck again. Both sides

07:22 Preset

07:23 SX GCS stuck again, DX not GS found

07:27 Preset

07:30 WFS on DX not working properly. Resending preset, left side only

Still nothing. Image not arriving on time

07:33 Restarting GCSL

07:33 Preset SX only

07:35 Starting exposure

2MJ0747+5048

07:41 Preset

07:43 Starting exposure

2MJ0746+1855

07:48 Preset

Unwrapping AZ drive

07:53 Starting exposure

BHBinaries

3857106104706784512 (J10275214+0331399) 14.8 mag

08:00 Preset

08:08 Starting exposure

It looks like an apparent double star, a much fainter one just an 1,5 away. Both are within the fiber

4029336286140566400 (J12130153+3513578) 14.5 mag

08:21 Preset

It looks like an apparent double star, a much fainter one just an 1,5 away. Both are within the fiber

08:29 Starting science exposure

ND_M3Cluster

NGC5272-357

Clear identification is impossible with those clouds. We only see one star

08:44 Faint target, clouds, crowded field. We will do a pointing check first

08:48 Preset

08:55 Starting exposure.

Not waiting for the WFS, Clouds are only getting thicker

NGC5272-289

Clear identification is impossible with those clouds. We only see one star

09:39 Preset

09:47 Starting exposure

OSU BHBinaries

3953673427835638784 J12203782+2229048

10:32 Preset

10:34 Star not found on SX and DX. Clouds or pointing? We will know shortly. Pointing check

10:38 Preset

10:47 Starting exposure

3906039697902758528 (J12035690+0916227)

11:01 Preset

GCS is stuck again, both sides. Restarting GCS

11:04 Preset

11:09 Starting exposure

1550602907481860480 (J13191371+4505098)

11:19 Preset

Target not found on SX. Pointing check

11:26 Preset

My mistake. Send as acquire preset

11:28 Preset

11:33 Starting exposure

OSU_MWAbundDisp

2MJ1343+5500

11:41 Preset

11:43 Starting exposure

J09045727+2621482

11:53 Preset

11:57 Starting exposure

OSU_BHBinaries

3992896714154450176 (J11261825+2351553) (V=13.1)

12:04 Preset

Unwrapping AZ drive

12:17 Starting exposure

12:32 Chiller 0402 Fail to Cool Alarm. Chilled Water Low Flow Alarm

12:34 Also more clouds are coming in during the last 2-3 minutes of the exposure. Lost target on the right.

12:34 Exposure done, waiting for Riccardo to deal with the chiller

12:38 Sending preset again, to repeat the exposure. SNR too low.

12:45 Starting exposure

1506340619499390720 (J14095267+4703177) (V=14.3)

13:02 Preset

13:11 Starting exposure

13:20 And we are done! 12deg twilight